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EXAMINER

OREILLY, PATRICK F

ART UNIT PAPER NUMBER

3749

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE  | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS                               | 04/10/2007 | PAPER         |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/547,446

Applicant(s)

RYU, JAE SOO

Examiner

Patrick F. O'Reilly III

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 August 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 8/26/2005
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Priority***

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d) and 35 U.S.C. 120. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

### ***Information Disclosure Statement***

2. The information disclosure statement (IDS) submitted on August 26, 2005 is acknowledged. The submission is in compliance with the provisions of 37 C.F.R. § 1.97 and 37 CFR § 1.98 and, therefore, the references therein have been considered.
3. Foreign patent numbers KR 96-4412 U and JP 61-189820 U, which were included in the international search report, have not been considered because these two references were not listed in the information disclosure statement. Moreover, a copy of each document, accompanied by an English abstract or statement of relevance, is also required for these two references to be considered.

### ***Drawings***

4. The drawings are objected to because, in Figure 6, the leader line associated with reference character "102" is not properly pointing to the "engaging protrusion" on the "adjusting plate 100". Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet,

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even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### *Specification*

5. The disclosure is objected to because of the following informalities:

On page 1 of the specification, in the third line of paragraph [2], the phrase, "...left and right sides and of a dashboard...", should be corrected to read: "...left and right sides of a dashboard...".

On page 1 of the specification, the phraseology used in paragraph [4] is unclear. This paragraph should be rewritten using clearer language.

On page 1 of the specification, in the third line of paragraph [6], the word "increase" should be changed to the word "increases".

On page 2 of the specification, the phraseology used in lines 2-3 of paragraph [8] is unclear. These lines should be rewritten using clearer language.

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On page 2 of the specification, in the third line of paragraph [11], the phrase, "...for long time...", should be corrected to read: "...for a long time...".

On pages 4-6, in paragraphs [26], [29], [30], [43], and [44] of the specification, the word "windshield" is improperly written as two words "wind shield". The superfluous space in this word should be deleted.

On page 4 of the specification, the phraseology used in lines 1-2 of paragraph [28] is unclear. These lines should be rewritten using clearer language.

On page 4 of the specification, in the second line of paragraph [29], the word "collide" should be changed to the word "collided".

On page 4, in paragraph [35] of the specification, the word "dashboard" is improperly written as two words "dash board". The superfluous space in this word should be deleted.

On page 5 of the specification, in the first line of paragraph [38], the word "winder" should be changed to the word "winter".

On page 6 of the specification, in the first line of paragraph [47], the word "warmed" is misspelled "wormed".

On page 7 of the specification, in the sixth and seventh lines of paragraph [51], the word "meets" should be changed to the word "metes".

Appropriate correction is required.

#### *Claim Notes*

6. Claim 3 utilizes the transitional phrase "...characterized in that...". The examiner has considered the phrase "...characterized in that..." to be an open-type transition, which is equivalent to "comprising" or "including". See MPEP § 2111.03.

***Claim Objections***

7. Claims 1-3 are objected to because they include reference characters which are not enclosed within parentheses.

Reference characters corresponding to elements recited in the detailed description of the drawings and used in conjunction with the recitation of the same element or group of elements in the claims should be enclosed within parentheses so as to avoid confusion with other numbers or characters which may appear in the claims. See MPEP § 608.01(m).

8. Claim 2 is objected to because of the following informalities: in line 13 of this claim, the reference character denoting the “adjusting plate” should be “100” in lieu of “10”. Appropriate correction is required.

9. Claim 3 is objected to because of the following informalities: in line 7 of this claim, the word “windshield” is improperly written as two words “wind shield”.

***Claim Rejections - 35 USC § 102***

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. **Claim 3** is rejected under 35 U.S.C. 102(b) as being anticipated by Kern (US 4,610,196).

The specification and the drawings in the Kern reference disclose all of the elements recited in **claim 3** of this application.

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12. Specifically, in regard to claim 3, which is directed to an apparatus for adjusting a direction of wind in a cooling and warming system of a vehicle, the Kern reference discloses all of the claimed elements, including warming and cooling wind from the warming and cooling system of a vehicle discharged in the direction of an upper surface of the dashboard (upper wall 14) by an adjusting plate (swivel damper 26) in such a manner that a circular adjusting plate (swivel damper 26 having a curved shape) is independently provided and is inserted into an end portion of the dashboard (upper wall 14) contacting with a front windshield (pane 15) for thereby surrounding an upper side of the ventilation port (air outlet opening 17). Refer to Kern, Figure 2; column 3, lines 27-50; and column 4, lines 19-23. Therefore, because all of the elements in claim 3 of this application are disclosed by the Kern reference, this claim is rejected in accordance with 35 U.S.C. 102(b).

***Claim Rejections - 35 USC § 103***

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. **Claim 1** is rejected under 35 U.S.C. 103(a) as being unpatentable over Moore et al. (US 2,796,820) in view of Marotta (US 5,232,403). These two references, when considered together, teach all of the elements recited in **claim 1** of this application.

15. In particular, claim 1 of this application is obvious when Moore et al. is viewed in light of Marotta. Moore et al. discloses the invention substantially as claimed, including: a body (frame

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member 40) in which a guide groove (spring retainer 22) having a spring (coil spring 23) is formed at left and right sides (as best shown in Fig. 3), and a switch (finger lift 27) having an engaging hole (hole containing hinge 20 for hingedly engaging cover 19) at an upper center portion is formed, and an adjusting plate (cover 19), and a support protrusion (cap 24, which bears up against a flat surface 25 formed on the lower part of the cover 19) into which an upper end of the spring (coil spring 23) is inserted is protruded from a lower surface of both sides, wherein the adjusting plate (cover 19) is engaged with a guide groove (spring retainer 22) of the body (frame member 40), wherein warming and cooling wind from the warming and cooling system of a vehicle is discharged in the direction of an upper surface of the dashboard (instrument panel 21) by an adjusting plate (cover 19) that is located at the upper portion of the ventilation port (louvers 18). Refer to Moore et al., Figures 1-3; column 3, lines 1-26. However, claim 1 of this application further discloses that the body has an elongated hole formed in a lower side of the engaging hole, the adjusting plate has an engaging protrusion at the upper and lower sides of its back surface, and that the adjusting plate appears and disappears from the dashboard. Moore et al. does not contain these additional limitations. Marotta, although, teaches an air register with a retractable deflector having a register frame (10), which contains an elongated slot (18) formed at a lower side of a threaded aperture (56), an outer arcuate sheet (20) with a stop flange (30) protruding from its upper edge and a further stop flange (32) protruding from its lower edge, wherein the outer arcuate sheet (20) is extendable from and retractable into register frame (10) by virtue of elongated slot (18) for the purpose of providing a nested deflector which is capable of providing the adjustable redirection of air entering a ventilated space. See Marotta, Figures 1-3; column 1, lines 7-9, 31-38, and 58-68; and column 2, lines 1-14.



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Therefore, when Moore et al. is viewed in light of Marotta, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the air deflection apparatus of Moore et al. by replacing the externally mounted adjusting plate (cover) with a retractable adjusting plate (deflector), as taught by Marotta, in order to provide an air deflecting means, which allows for the adjustable redirection of air entering a ventilated space, but remains completely nested in the dashboard when it is not in use so as to not encroach upon the space in the occupant compartment. See Marotta, column 1, lines 7-9 and 31-38.

16. **Claim 2** is rejected under 35 U.S.C. 103(a) as being unpatentable over Dangauthier (US 3,264,971) in view of Shin (KR.10-2004-0003260). These two references, when considered together, teach all of the elements recited in **claim 2** of this application.

17. In particular, claim 2 of this application is obvious when Dangauthier is viewed in light of Shin. Dangauthier discloses the invention substantially as claimed, including: a body (wall of the conduit C) in which a guide groove (abutment 13) is formed on a side thereof, and an elongated hole (aperture at the outlet end of conduit C) is formed at a center; and an adjusting plate (part-cylindrical hood 1), wherein warming and cooling wind from the warming and cooling system of a vehicle is discharged in the direction of an upper surface of the dashboard (dashboard P) by an adjusting plate (part-cylindrical hood 1) that appears and disappears from the upper portion of the ventilation port (conduit C). Refer to Dangauthier, Figures 1-4; column 2, lines 19-63. However, claim 2 of this application further discloses that the adjusting plate has an engaging protrusion at a lower side of its back surface and a rack gear formed on one side of its lower surface, the body is engaged to guide grooves formed at its left and right sides, and the apparatus further includes a motor with a driving gear for engaging the rack gear,

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wherein the motor is rotated in a normal or reverse direction based on an operation of a switch. Dangauthier does not contain these additional limitations. Shin, although, teaches a vehicle air vent (10) with a sliding cover (20), which cover (20) has an engaging protrusion disposed at a lower end of its back surface (Fig. 4) and a rack gear (30) formed on one side of its lower surface, the air vent body (frame of grille 12) contains guide grooves (guides 21) on its left and right sides, and the air vent (10) further includes a motor (33) with a pinion gear (31) for engaging the rack gear (30), wherein the motor (33) is rotated in a normal or reverse direction, based on an operation of a switch (34) for the purpose of automatically opening or closing the air vent cover (20) when the switch (34) is depressed by the vehicle occupants. See Shin, Figures 2-4; also see attached English abstract for Shin from DERWENT. Therefore, when Dangauthier is viewed in light of Shin, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the air deflection apparatus of Dangauthier by automating the manual adjusting plate (deflector) through the use of a motor-driven, rack and pinion gear system, as taught by Shin, in order to allow the air vent deflector to be opened or closed automatically when a switch is depressed by the vehicle occupants. See attached English abstract for Shin from DERWENT.

### *Conclusion*

18. See attached form PTO-892 for additional pertinent prior art, which was not directly relied upon in this action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick F. O'Reilly III whose telephone number is (571) 272-3424. The examiner can normally be reached on Monday through Friday, 8:30 am to 5:30 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Rinehart can be reached on (571) 272-4881. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Pf03  
pfo3

  
KENNETH RINEHART  
PRIMARY EXAMINER